

## **REMARKS**

In the Office Action mailed July 16, 2004, the Examiner rejected all the pending claims under 35 C.F.R. § 103(a). In the Advisory Action dated January 12, 2005, the Examiner stated that the Response to the Office Action mailed July 16, 2004 did not place the application in condition for allowance. On January 18, 2005, applicants filed a notice of appeal. By filing this Request for Continued Examination, applicants withdraw the application from appeal to reopen prosecution of the application. (See, MPEP § 1215.01.) Applicants have amended all of the pending independent claims (claims 1, 11, 21, 24, 36, and 45). Claims 15 and 32 were also amended for antecedent basis purposes. Although applicants maintain that the prior art of record fails to show or suggest the invention as claimed at the time of filing its notice of appeal, the present amendment is submitted to focus the claimed subject matter on specific aspects of the invention. No new matter has been added.

Applicants claim a system and method for measuring intelligibility of a speaker. Intelligibility is the degree to which others can understand a person's speech. (See, Applicants' Specification, page 2, lines 12-13.) An objective score of a person's intelligibility may be important in many situations, such as when hiring customer service representatives, teachers, and emergency response coordinators. (See, Applicants' Specification, page 3, lines 7-12.) Because the intelligibility of a speaker is based on a listener's perception of the speaker's speech, both the speaker and the listener (i.e., at least two people) are used to evaluate intelligibility.

In amended claims 1, 11, 21, 24, 36, and 45, applicants recite an intelligibility measuring system or method. The person whose intelligibility is being evaluated (the speaker) speaks items, such as a list of words, sentences, paragraphs, and so on. The

listener hears the speaker who is speaking the items. The listener does not know what items the speaker will speak prior to hearing the speaker speaking the items. The listener then repeats out loud (by voice) what he hears when listening to the speaker. A transcription of what the listener repeats may be automatically created using an automatic speech recognition transcription program. The transcription is then compared to a text of the items to produce an intelligibility score for the speaker. Because in this instance neither the listener nor another person has to prepare a transcription by hand, the intelligibility system can provide a large number of intelligibility scores in a short period of time.

The Examiner rejected claims 1, 2, 4-8, 11-18, 24, 26, 28, 29, 32, 33, 36, 37, 42, 44, and 45 under 35 C.F.R. § 103(a) as being obvious in light of the combination of U.S. Patent No. 5,634,086 ("Rtischev") and U.S. Patent No. 6,122,614 ("Kahn"). However, the combination of Rtischev and Kahn fails to show or suggest the intelligibility system and method as claimed by the applicants.

Rtischev discloses a method and apparatus for voice-interactive language instruction. (See, Rtischev, Title.) "A system can administer a lesson, and particularly a language lesson, and evaluate performance in a natural interactive manner while tolerating strong foreign accents, and produce as an output a reading quality score." (See, Rtischev, Abstract.) The user of the system uses a microphone or telephone to respond to lesson materials. (See, e.g., Rtischev, Figure 2.) The user's responses are detected by a speech recognition system and a scoring system analyzes the speech and reading proficiency. (See, e.g., Rtischev, column 3, lines 10-65.)

Rtischev does not show or suggest that a human listener hears the user. The user speaks directly into a system via the microphone or telephone. A second human is not

placed between the user and the system to repeat what the user says to the system. Nor is there any suggestion to add a second human to repeat the user's responses as this would be unnecessary in a system that provides a reading quality score as an output.

Moreover, Rtischev does not show or suggest preparing a transcription, never mind a transcription of what the listener repeats. There is no suggestion within Rtischev to prepare a transcription as this activity would impede with the interactive nature of the language instruction system. As there is no teaching for preparing a transcription, there can be no teaching in Rtischev to compare the text of the items with the transcription. Thus, Rtischev fails to show or suggest at least: (1) a human listener, (2) preparing a transcription, (3) comparing the transcription with the text of the items, and (4) measuring intelligibility.

Kahn falls short of overcoming these deficiencies in Rtischev. Kahn discloses a system and method for automating transcription services. (See, Kahn, Title.) The system receives a voice dictation file from a user having the status of enrollment, training, or automated. (See, Kahn, Abstract.) If the user's status is either enrollment or training, a human operator hand transcribes the voice dictation file. (See, e.g., Kahn, Figs. 2b and 2c.) If the user's status is enrollment, the human operator also manually creates a verbatim file. (See, e.g., Kahn, Fig. 2b.) If the user's status is training, the speech recognition system is used to generate a written text, which the human operator manually edits to create the verbatim file. (See, e.g., Kahn, Fig. 2c.) The verbatim file is then used to train the speech recognition system. (See, e.g., Kahn, Figs. 2b and 2c.) If the user's status is automated, the voice dictation file is automatically converted to a written file without the use of a human operator. (See, e.g., Kahn, column 10, lines 48-57.)

At most, Kahn teaches a means for automatically preparing a transcription of what the user records if the user's status is automated. A human operator is not involved in the preparation of a transcription for these users. For users that have the status of enrollment or training, the human operator creates a transcribed file and a verbatim file, both of which are text files that are stored in the user's subdirectory. There is no reason, much less any suggestion, for the human operator to repeat out loud what he hears to prepare these text files. Thus, Kahn does not show or suggest the human operator repeating out loud what he heard when listening to the voice dictation file.

Moreover, Kahn does not show or suggest comparing the transcription with the text of the items. The human operator or the speech recognition system receives a voice dictation file, which is an audio file created by the user by speaking into a recording device. Neither the human operator nor the speech recognition system receives a text of what the user was reading from, because no such text exists. The user would not need a transcription if he already had a hard copy of what he read into the recorder. Thus, the transcription prepared by either the human operator or the speech recognition system is never compared with the text of items repeated by the speaker.

The combination of Rtischev and Kahn fails to show or suggest at least: (1) a human listener that repeats out loud (by voice) what he hears, and (2) comparing the transcription of what the listener repeats with the text of the items. Because the combination of Rtischev and Kahn fails to show or suggest each and every element of claims 1, 11, 21, 24, 36, and 45, these claims are not obvious in light of the combination of Rtischev and Kahn.

Claims 2 and 4-8 depend from claim 1. Claims 12-18 and 42 depend from claim 11. Claims 26, 28, 29, 32, 33, and 44 depend from claim 24. Claim 37 depends from claim 36.

Accordingly, applicants submit the claims 2, 4-8, 12-18, 26, 28, 29, 32, 33, 37, 42, and 44 are not obvious in light of the combination of Rtishev and Kahn for at least the reasons described with respect to claims 1, 11, 21, 24, 36, and 45.

The Examiner also rejected claims 9, 10, 19-23, 34, 35, 38, 40, 41, and 43 under 35 C.F.R. § 103(a) as being obvious in light of the combination of Rtishev, Kahn, and U.S. Patent No. 5,059,127 ("Lewis"). Claims 9, 10, and 41 depend from claim 1. Claims 19 and 20 depend from claim 11. Claims 22-23 and 43 depend from claim 21. Claims 34 and 35 depend from claim 24. Claims 38 and 40 depend from claim 36.

As described above, the combination of Rtishev and Kahn does not show or suggest a human listener that repeats what he hears out loud, or comparing the transcription of what the listener repeats with the text of the items. Lewis was cited for the teachings that Item Response Theory "allows creation of a test in which different individuals receive different questions, yet can be scored on a common scale" as well as "permits determination in advance of test administration of the level of ability and the accuracy with which ability has been measured." (See Office Action, pages 3-4.) However, these citations to Lewis fail to overcome the above-noted deficiencies in Rtishev and Kahn. Accordingly, for at least the foregoing reasons, applicants submit that claims 9, 10, 19, 20, 22, 23, 34, 35, 38, 40, 41, and 43 are not obvious in light of the combination of Rtishev, Kahn, and Lewis.

In light of the above remarks, applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103(a).

## **CONCLUSION**

In light of the above amendments and remarks, applicants submit that the present application is in condition for allowance and respectfully request notice to this effect. The Examiner is requested to contact applicants' representative below if any questions arise or if she may be of assistance to the Examiner.

Respectfully submitted,

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